

|      |    |        |         |         |    |             |           |      |      |      |      |       |       |       |      |     |      |      |      |       |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|------|----|--------|---------|---------|----|-------------|-----------|------|------|------|------|-------|-------|-------|------|-----|------|------|------|-------|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| NTDB | id | 98     | BSU     | 24710   | NP | 390351.1    | .....MNEK | GFTL | VEML | IVLF | IITS | ILLLI | TIPNV | TKHNQ | T    | QKK | GCE  | GLQN | MMVK | AQMTA | F | E | L | D | H | E | G | Q | T | 63 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| NTDB | id | 416205 | E3S95   | RS02400 | WP | 000472257.1 | .....     | MFK  | FL   | ..   | KKT  | QAFTL | I     | EML   | LVLL | IIS | LLLL | ILI  | IPNI | AKQTA | H | I | Q | S | T | G | C | N | A | Q  | V | K | M | V | N | S | Q | I | E | A | Y | A | L | K | H | N | R | N | P | 68 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| NTDB | id | 32     | MW      | RS07995 | WP | 000472256.1 | .....     | MFK  | FL   | ..   | KKT  | QAFTL | I     | EML   | LVLL | IIS | LLLL | ILI  | IPNI | AKQTA | H | I | Q | S | T | G | C | N | A | Q  | V | K | M | V | N | S | Q | I | E | A | Y | A | L | K | H | N | R | N | P | 68 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| NTDB | id | 16     | SA      | RS07765 | WP | 000472256.1 | .....     | MFK  | FL   | ..   | KKT  | QAFTL | I     | EML   | LVLL | IIS | LLLL | ILI  | IPNI | AKQTA | H | I | Q | S | T | G | C | N | A | Q  | V | K | M | V | N | S | Q | I | E | A | Y | A | L | K | H | N | R | N | P | 68 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| NTDB | id | 588    | KW2     | RS10845 | WP | 051303741.1 | MSK       | AL   | S    | L    | V    | K     | I     | H     | G    | R   | K    | L    | C    | Q     | K | Q | A | F | T | L | I | E | M | L  | V | L | A | I | I | S | I | L | I | L | F | V | P | N | L | T | K | Q | K | E  | A | V | N | D | K | G | A | A | V | K | V | V | E | S | Q | A | E | L | Y | S | L | D  | K  | N  | .. | ED | 72 |
| NTDB | id | 460    | GPW51   | RS00790 | WP | 011921720.1 | .....     | ..   | M    | K    | K    | L     | V     | E     | M    | K   | V    | K    | G    | F     | T | L | V | E | M | L | V | V | L | G  | I | I | S | V | L | L | L | F | V | P | N | L | T | K | Q | K | E | A | V | N  | D | K | G | A | A | V | K | V | V | E | S | Q | A | E | L | Y | S | L | D | K | N | .. | ED | 72 |    |    |    |
| NTDB | id | 502    | SM12261 | RS00955 | WP | 000738641.1 | .....     | ..   | M    | K    | K    | M     | T     | F     | L    | K   | K    | A    | K    | V     | K | A | F | T | L | V | E | M | L | V  | V | L | I | S | V | L | L | L | F | V | P | N | L | T | K | Q | K | E | A | V  | N | D | K | G | A | A | V | K | V | V | E | S | Q | A | E | L | Y | S | L | D | K | N  | .. | ED | 72 |    |    |
| NTDB | id | 162    | SP      | RS10370 | WP | 000738627.1 | .....     | ..   | M    | K    | K    | M     | T     | F     | L    | K   | K    | A    | K    | V     | K | A | F | T | L | V | E | M | L | V  | V | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A  | V | N | D | K | G | A | A | V | K | V | V | E | S | Q | A | E | L | Y | S | L | E | K  | N  | .. | ED | 72 |    |
| NTDB | id | 272    | KZH43   | RS09255 | WP | 000738626.1 | .....     | ..   | M    | K    | K    | M     | T     | F     | L    | K   | K    | A    | K    | V     | K | A | F | T | L | V | E | M | L | V  | V | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A  | V | N | D | K | G | A | A | V | K | V | V | E | S | Q | A | E | L | Y | S | L | E | K  | N  | .. | ED | 72 |    |
| NTDB | id | 231    | SPD     | RS09885 | WP | 000738626.1 | .....     | ..   | M    | K    | K    | M     | T     | F     | L    | K   | K    | A    | K    | V     | K | A | F | T | L | V | E | M | L | V  | V | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A  | V | N | D | K | G | A | A | V | K | V | V | E | S | Q | A | E | L | Y | S | L | E | K  | N  | .. | ED | 72 |    |
| NTDB | id | 197    | SPR     | RS09420 | WP | 000738626.1 | .....     | ..   | M    | K    | K    | M     | T     | F     | L    | K   | K    | A    | K    | V     | K | A | F | T | L | V | E | M | L | V  | V | L | I | S | V | L | F | L | L | F | V | P | N | L | T | K | Q | K | E | A  | V | N | D | K | G | A | A | V | K | V | V | E | S | Q | A | E | L | Y | S |   |   |    |    |    |    |    |    |

|           |    |        |         |         |    |             |                                        |     |
|-----------|----|--------|---------|---------|----|-------------|----------------------------------------|-----|
| NTDB      | id | 98     | BSU     | 24710   | NP | 390351.1    | PSLADLQSEGYVKKDAVCPNGKRII.ITGGEVKEH    | 98  |
| NTDB      | id | 416205 | E3S95   | RS02400 | WP | 000472257.1 | SSIEDLIAADGFIKEEQKTKCKSGETITISN.GEAVAN | 103 |
| NTDB      | id | 32     | MW      | RS07995 | WP | 000472256.1 | SSIEDLIAADGFIKEAQKTKCKSGETITISN.GEAVAN | 103 |
| NTDB      | id | 16     | SA      | RS07765 | WP | 000472256.1 | SSIEDLIAADGFIKEAQKTKCKSGETITISN.GEAVAN | 103 |
| NTDB      | id | 588    | KW2     | RS10845 | WP | 051303741.1 | PNLSELLSAGMITQKQVTAAYDDYYDQNKNEQRNFDD  | 116 |
| NTDB      | id | 460    | GPW51   | RS00790 | WP | 011921720.1 | ATVADLQAKGYITEKQAKQYATAKK.....         | 93  |
| NTDB      | id | 502    | SM12261 | RS00955 | WP | 000738641.1 | ASLSKLQADGRITEEQAKAYKEHYHAKQNTSQTVAD.  | 107 |
| NTDB      | id | 162    | SP      | RS10370 | WP | 000738627.1 | ASLRKLQADGRITEEQAKAYKEYNDKNGGANRKVND   | 108 |
| NTDB      | id | 272    | KZH43   | RS09255 | WP | 000738626.1 | ASLRKLQADGRITEEQAKAYKEHYHDKNGGANRKVND  | 108 |
| NTDB      | id | 231    | SPD     | RS09885 | WP | 000738626.1 | ASLRKLQADGRITEEQAKAYKEHYHDKNGGANRKVND  | 108 |
| NTDB      | id | 197    | SPR     | RS09420 | WP | 000738626.1 | ASLRKLQADGRITEEQAKAYKEHYHDKNGGANRKVND  | 108 |
| NTDB      | id | 530    | SMSK321 | RS09230 | WP | 000738643.1 | ASLSKLQADGRITEEQAKAYNEYYYAKNGGANRKVND  | 108 |
| NTDB      | id | 431    | SGO     | RS09410 | WP | 012130940.1 | ATLSKLVAAGNISQKQADSYPKAYYGGKNNSETQAVAN | 105 |
| NTDB      | id | 396    | FSA28   | RS09395 | WP | 002263437.1 | ATLSKLVASGDITQEQANSYKDDYAKHPSKTRHVAN   | 104 |
| NTDB      | id | 387    | SMU     | RS09025 | WP | 002263437.1 | ATLSKLVASGDITQEQANSYKDDYAKHPSKTRHVAN   | 104 |
| consensus |    |        |         |         |    |             | *** *! ***! ***** * ** *               |     |

- X non conserved
- X similar
- X > 50% conserved